



Missouri Department of Natural Resources

Water Quality Coordinating Committee Water Pollution Control Program

Meeting Minutes

December 17, 2002

WATER QUALITY COORDINATING COMMITTEE

USGS
Columbia Environmental Research Center
Conference Building
4200 New Haven Road
Columbia, Missouri

December 17, 2002
10:00 a.m.

MEETING AGENDA

Abnormal Hermaphroditism in Shovel-Nose Sturgeon, Diana Papoulias, USGS

Watershed Rule, Jeannette Schafer, US EPA Region VII

Clean Water SRF Program Overview, Carrie Schulte, WPCP

303(d) List Status, Becky Shannon, WPCP

Other

Agency Activities

Meetings & Conferences

MISSOURI WATER QUALITY COORDINATING COMMITTEE
MEETING MINUTES

December 17, 2002

Columbia Environmental Research Center
Columbia, Missouri

Attendees:

| | | | |
|-----------------|---------------------------------------|-------------------|------------------------|
| Becky Shannon | MoDNR/WPSCD/WPCP | Bob Williamson | KCMO Water Services |
| Don Yoest | MO Dept. of Ag | Bob Bacon | MoDNR/GSRAD/WRP |
| Cindy DiStefano | MDC | Jeanne Heuser | USGS |
| Joe Bachant | MDC, retired | Miya Barr | USGS-WRD |
| Bob Steiert | EPA, Region VII | Mohsen Dkhili | MoDNR/WPSCD/WPCP |
| Nancy Giddens | Mo-Ag | Ken Struempf | MoDNR/WPSCD/SWCP |
| Robert Brundage | Mo-Ag | Wendi Rogers | FAPRI, UMC |
| Sharon Clifford | MoDNR/WPSCD/WPCP | Dorris Bender | City of Independence |
| Bill Henry | BASF, Hannibal | Terry Timmons | MoDNR/WPSCD/PDWP |
| Charles Putnam | National Park Service | Steve Taylor | MO Corn Growers Assoc. |
| Liz Grove | Clarence Cannon Wholesale Water Comm. | Trent Stober | MEC Water Resources |
| Roger Korenberg | MoDNR/OAC/EAO | Anne Peery | MoDNR/WPSCD/WPCP |
| Bob Broz | University Outreach & Extension | Gail Wilson | MoDNR/WPSCD/WPCP |
| Mary West | City of Moberly | Michael Bollinger | Ameren |
| Verel Benson | FAPRI, UMC | Steve Bauguess | MoDNR/WPSCD/WPCP |
| Michael Heaton | MoDNR/WPSCD/NERO | Darlene Schaben | MoDNR/WPSCD/WPCP |
| Diana Papoulias | USGS | | |

Introductions were made.

Abnormal Hermaphroditism in Shovel-Nose Sturgeon in Missouri River, Diana Papoulias, USGS

This work presented is a result of another project that USGS had been working on in the Missouri River for the last year. In one location, they decided they needed to develop some non-lethal methods to determine the reproductive state in shovelnose sturgeon. During the course of this work, they discovered a very high percentage of shovelnose sturgeons that had gonads containing both testicular and ovarian tissue. In general, of all the vertebrates, fishes are the most common for which hermaphroditism is a normal reproductive strategy. Hermaphroditism in general is very rare. There are about 8 orders of fishes (all marine) that display normal hermaphroditism. They develop this reproductive strategy because it's difficult for them to find mates. There are 10 orders of fishes showing abnormal hermaphroditism. These are fresh water fish except for cods and flat fishes.

The shovelnose sturgeon is very primitive. It takes 7 years or longer to mature. Exposure to contaminants may be a reason for this. During the study 385 shovelnose sturgeons, all over 500 mm in length, were collected during a 12-month period. Fifty percent were caught between January and February. Of these, 28% of the males showed abnormal hermaphroditism. Pictures were shown of normal and abnormal gonads and different stages of development of eggs. Some sturgeon showed development of egg on one side of the fish and normal development of testes on the other. Seventeen out of 22 could be identified as abnormal. The other 5 were thought to be normal males until a histology study was done.

Diana explained some possible causes for the abnormalities. Hermaphroditism has been noted below outfalls, especially in England. Estrogen in the water below sewage outfall has become an indicator of abnormalities.

Other causes include senescence, genetic abnormality, hybridization, radiation, chemicals, diet, fluctuation of temperatures and environmental disturbance.

Diana talked about other occurrences where studies had been done on the Missouri River and some of the possible stressors. Researchers feel possible causes could be from disruption of the normal spawning regime, changes in the habitat, a low food base, restrictive diet, the age of the fish, ag chemicals and PCB contamination. Some abnormalities were found only by looking at histological sections. Abnormal hermaphroditism is occurring at several locations along the Missouri River and researcher are still trying to determine causes.

Watershed Rule, Jeannette Schafer, US EPA Region VII

Handout: Watershed Rule

Bob Steiert presented for Jeannette, who was back at the office working on the 303(d) list. The handout gave some history of when the Watershed Rule began and what has happened since. Bob mentioned that Jeannette had given a briefing for this group at a previous meeting and there has really been no change since. The new rule had been proposed in 2002 and the final expected in 2003. The latest update is that the regulation to withdraw the 2000 TMDL rule is at OMB. The proposed Watershed Rule is still being reviewed at senior levels in EPA.

Sharon Clifford said that Don Brady, EPA Headquarters, was also in attendance at the TMDL Conference in Phoenix. He mentioned that the Watershed Rule has been elevated to senior levels at the White House. Rumors have been heard that the rule may never see the light of day. Five listening sessions regarding the rule were held around the country for input. Before the rule went to OMB, on one of the conference calls, forty states unanimously agreed that EPA should proceed with the rule and put it on public notice.

In particular to Missouri, in the elements of the latest proposed Watershed Rule, the first element states a reliance on the state's Continuing Planning Process (CPP). Bob stated that Missouri is one of the few states that have an updated CPP. The second element is a long-term monitoring strategy to assess all state waters. A meeting will be set up with Missouri to discuss this continuous monitoring strategy. Bob felt that Missouri was in a good position should the proposed Watershed Rule pass. This rule would make the listing process happen every 4 years instead of every 2 years. Sharon mentioned that Mr. Brady recommended Missouri proceed with the 2004 303(d) list and use the new listing methodology since there is no guarantee this rule will be in effect in time. Sharon said we are proceeding with working on the 2004 list. Becky mentioned that the new EPA rule is not in the December 16 Federal Register as expected.

Clean Water SRF Program Overview, Carrie Schulte, WPCP

Becky explained that Carrie could not attend this meeting due to other program commitments regarding a State Revolving Fund (SRF) presentation to the Clean Water Commission. We will try to reschedule this presentation. Becky explained that SRF is a loan program used by wastewater treatment facilities by municipalities to construct wastewater treatment facilities. We will be looking at opportunities to use this funding for nonpoint source (NPS) management. Many states are using SRF money to fund some NPS projects. There is a program through Department of Agriculture that helps to fund animal waste facilities. Let Becky know if you want more information on this before we get this rescheduled. The Clean Water Commission is interested in using SRF money for NPS projects. A question was asked about competitiveness of SRF funding and if there would be an increase of money available. Bob Steiert suggested looking at the Intended Use Plan (IUP) for SRF on the web for priority points and categories. A question was asked if the additional requirements for engineering will be imposed on the nonpoint source projects as well as municipalities or if they could be reduced for communities. It was stated that the more over-engineering municipalities have to do, the less funding there is to go around. The CSO partnership has been trying to get money appropriated at the federal level. This was in the Wetland Water Quality Act last year. Funding was authorized last year but not appropriated. Becky will inform program staff of these issues raised.

303(d) List Status, Becky Shannon, WPCP

Becky had anticipated that the list would have been reviewed and be able to announce EPA's decision but EPA is still working very hard on their review. We expect to hear something very soon. During the process of putting the list together, the department put together a methodology document. The Clean Water Commission directed the department to put this methodology into rule. We are proceeding with development of this document into rule and also reference EPA's rule. When it is published and out for public comment, the WQCC group will be informed. The 303(d) list is a complicated, complex situation and everyone is trying to ensure all bases are covered.

Discussions/suggestions followed on how the listing process could possibly be improved. There was a suggestion that the rule talk about how the list was put together. When the list is proposed, it should include a summary and reference where the data can be located. Also, information should be included on the age of the data. Becky said the rule does cover this. Another suggestion was to include information on how to remove a waterbody from the list. Becky said that if EPA disapproves anything on the 303(d) list that DNR submitted, the list will have to be put on public notice.

Other

319 Program – Becky stated that we don't know what the 319 funding will look like until the federal budget is passed. The applications received from the FY03 RFP will be reviewed in January. We received a record number of applications for FY03. There was a recent bill passed and enacted at the federal level that allows expenditure of 319 grant money for projects implementing Phase II storm water. If a community is subject to Phase II Storm Water requirements, 319 funding may be used. This is known as Senator Chafee's amendment and states that, "...for FY03, funds from 319 can be used to implement activities covered by Phase II NPDES storm water permits..." Mary West requested information on this.

This is significant because with the Farm Bill there is money available for on-the ground practices in the agricultural sector. In Missouri, 319 money can be used in ways that Farm Bill money can't. AgNPS SALT money can complement 319. Evaluations are done on EQIP and 319 to compare and show the effectiveness of funds.

Steve Taylor attended a meeting in Washington, D.C., and passed information on that he felt that 319 and Farm Bill are complementary. Missouri has several projects on the ground that could be good examples to showcase. Dov Weitman, EPA, is coordinating with USDA on the Farm Bill. Steve has a meeting with the chief of NRCS scheduled in January to discuss the Farm Bill further and coordinate the USDA side with the EPA side.

TMDL Conference in Phoenix – Sharon mentioned that one thing that was evident from the conference was that Missouri has a better working relationship with sister agencies than other states and felt that this meeting played an important role in making this good relationship.

Sharon mentioned that on January 30 at the Missouri Natural Resources Conference at Tan-Tar-A, she will be on a panel with Chuck Sutfin, EPA, and Tom Christiansen, USDA, to discuss TMDLs and working relationships between agencies on TMDL issues. There may be more guidance on how NRCS and DNR should work together. Sharon felt we are already doing this.

Steve Taylor said EPA has a hypoxia task force. Joe Engeln is the DNR representative. Diane Regis will be the contact on hypoxia for EPA, replacing retiring Robert Wayland. At a meeting in St. Louis that Steve attended, Diane made a comment that concerned Steve. Her comment was about the hypoxia issue and nutrient potential that is being caused through ag nonpoint nutrient contribution and that Farm Bill EQIP funding will solve the problems. But, in talking with NRCS, nutrient management is just a small piece. Hearing that the Farm Bill will solve every problem is unsettling. After five years the problems may still be there and then this

could mean that agriculture could be regulated in the future. Steve felt that more money should be spent on water quality and nutrient management and that EQIP money should be more targeted.

Bob Steiert agreed that maybe EQIP money should be more targeted. Steve said USDA seems to want to spread it to several different issues. Sharon suggested those concerned should attend the Missouri Natural Resources Conference and attend the panel discussion session. The web site for more information is www.mnrc.org. We may need to help EPA get this message to USDA to focus the resources.

Becky suggested we have the Farm Bill on the agenda for the February meeting.

Water Quality Standards – Trent asked about the status of Water Quality Standards criteria rulemaking. Becky said the rule is under development. One issue of concern is whole body contact. DNR has been discussing with EPA to not designate all waters as whole body contact this round but to go from fecal coliform as an indicator to e. coli. Then address whole body contact a year later. This is still being discussed. Trent asked about a target date because of water quality based permit issues with point sources and the need to get those started. Becky said it should be within the next few months. Becky will also get information about dissolved oxygen criteria to Trent at the next meeting.

Watershed Initiative – Becky said this is a Presidential Watershed Initiative where in the President's budget there is a specified \$21 million for funding 20 watershed-specific grants across the nation to do innovative watershed community-based projects. We are in the midst of this competition. Missouri submitted five proposals to EPA Region 7. Those include: Upper White River Basin, Meramec River, Blue River, Marais des Cygnes, and Peruque Creek. After the first of the year, Region 7 will forward four projects from the four-state region. The federal budget hasn't been finalized so the grant money is not yet available. Several proposals were bi-state proposals. Both states nominated the projects. There were two with Kansas and one with Arkansas.

CAFO Rule - Bob Steiert said the front page of the Kansas City Star newspaper talked about the new CAFO rule. The web page location is listed on the back of the Watershed Rule handout (www.epa.gov/npdес/caforule). On December 18, a meeting is scheduled at the Reardon Center with invited agencies from the four-region states to talk about the rule and implementation procedures. On Thursday, December 19, a meeting is scheduled at the Reardon Center with the regulated community. The goal is to train-the-trainers. States may have different ways of implementation. Ralph Summers is the EPA contact, (913) 551-7003. We will try to have Ralph attend the January meeting. Becky suggested that if Ralph is not available, we could try to have a DNR staff to do a presentation from Missouri's perspective.

Agency Activities

Bob Steiert mentioned that there is Water Quality Cooperative Agreement funding available for proposals. The deadline is December 30, 2002. This funding is essentially used for planning. EPA's new Competitive Grant Process Rules will apply. Auditors say competition should be fair and there may be changes. Bob felt that our grants have always been competitive and doesn't see many changes. This information is on EPA's web site. Karen Sherrill is the competition chairperson.

On May 5-7, 2003, there is an EPA Science Forum in Washington, D.C., talking about good science. Bob has been working with ORD staff about what we are doing now and going to be doing in the future. One thing they are trying to do is tying together methods/procedures for analyzing water and making it the same for drinking water and wastewater so chemists will only have one method. Meeting topics include, but are not limited to: emerging technology, computational toxicology, nano-technology, environmental futures, and biotechnologies. ORD wants regions to be working on assessing eco-risk, healthy populations communities, partnering with states and tribes, and watersheds TMDLs.

At a meeting with USGS Bob got a 25-page summary USGS/EPA ag-related research summaries.

Nancy Giddens announced that MO-Ag is sponsoring a Show-Me Ag Classic in Columbia on February 5-6. For registration or more information, contact Erin Luebbering at (573) 636-6130.

Sharon Clifford said the TMDL Policy Advisory Committee meetings will be changing with more speakers, more sub-committee reporting and extend meetings by ½ hour. She is hoping to get a speaker to discuss the trading program. The next meeting will be January 21 in Jefferson City at the DNR Conference Complex, 1738 E. Elm Street. She is trying to make the meetings more meaningful.

Charles Putnam said the Ozark National Riverways, along with USGS Water Resources Division, stated there had been a press conference regarding a study on bacterial contamination on 303(d) sections on Jack's Fork River. Ribotyping was part of this study.

Bob Broz said they are working with NRCS to hold five statewide meetings regarding the CAFO rule. The title is "Will the New CAFO Rule Impact You?" Those meeting dates are: Jan. 13 at Cameron; Jan. 15 at Sedalia; Jan. 16 at Hannibal; Jan. 22 at Dexter; and Jan. 23 at Mt. Vernon. The "Water Quality Short Course" will be held in April and they are already starting to take registrations. Bob mentioned that there are some minor changes in the courses offered.

Verel Benson had available the official publication of the 2002 report on Shoal Creek.

Jeanne Heuser mentioned the 7th Annual Missouri River Natural Resources Conference will be held June 1-4. The Call for Presentations has been extended to January 6.

The Upper Mississippi River Water Quality Assessment Report has been published. This is a compilation of water quality data collected over the last 20 years. This will be used to develop a common database of water quality. You can find the report on the web at: www.epa.gov/region5/water/umr_wq_assess.htm.

Mohsen Dkhili announced that there would be a PAC meeting after the WQCC meeting today to discuss fresh ideas related to modeling and TMDL data needs. Everyone is invited.

Anne Peery said the TMDL Unit is working on watershed mapping. They are trying to map all counties in the state with major watersheds on HUC 11 and HUC 14 levels. Anne passed around an example of Boone County. Let Anne know if you would like one. They are hoping to educate people about watersheds. She is trying to put together a portfolio to educate counties, people in decision-making positions, about TMDLs.

Steve Bauguess announced that there will soon be a 319 web site. There will be a link on DNR's WPCP web site. It will provide detailed project information on 138 projects dating back to 1992. It will also have the minigrant application, guidelines and criteria. Becky asked Bob Broz to be sure Tabitha is informed so there can be a link on MoWIN's web page.

Bob Steiert said he had a one-page document with an explanation on HUC numbers and would forward it to Darlene to forward to the group.

Becky said to be sure to inform her or Darlene if you had agenda items for future meetings.

Meetings & Conferences

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| Jan. | 29-31 | Missouri Natural Resources Conference, Tan-Tar-A, Osage Beach, www.mnrc.org |
| Feb. | 5-6 | Show-Me Ag Classic, Columbia; contact Erin Luebbering, (573) 636-6130 |
| April | 15-17 | Water Quality Short Course, Columbia |
| June | 1-4 | 7 th Annual Missouri River Natural Resources Conference (Jeanne Heuser, USGS) |